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EXAMINER	
NGUYEN, PHUONGCHAU BA	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/692,959	MAHANY ET AL.	
	Examiner	Art Unit	
	PHUONGCHAU BA NGUYEN	2464	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10,12-18,20-43 and 45-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10,12-18,20-43 and 45-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Objections

1. Claims 10, 12-13, 18, 20-21, 27-28, 31, 33-34, 37-41, 45-49, 51 are objected to because of the following informalities: "operable to" or "capable of" is an optional limitation and should be replaced with a positive limitation to make the claimed language positively recited, i.e., claim 12, "operable to control" (line 2) or "capable of communicating"(line 3) should be changed to ---for controlling (line 2)--- or ---for communicating (line 3)--- respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 10, 12-16, 18, 20-24, 26-30, 32-36, 38-43, 45-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Grube (5,058,199).

Claims 1-9. (cancelled)

Regarding claim 10, 18, 38-39,

Grube discloses a transceiver/integrated circuit (repeater having transmitters 117&217 and 118& 218, figs.1-2) for use in a wireless network device (cell 1 or 2 communication system, 110-118 and 210-218, figs.1-2) that operates in a communication system that includes a main communication network (with a radio device 500, figs. 1-2) and a radio network (with other cell field units 101-104, 201-201 figs.1-2), the transceiver comprising:

at least one radio unit (117-118, 217-218) configured to communicate with the main communication network (with the radio device 500, figs.1-2) and the radio network (with other field units 101-104, 201-204);

wherein the transceiver/integrated circuit (repeater having transmitters 117&217 and 118& 218, figs.1-2) is operable to enable the wireless/mobile network device (cell 1 or 2 communication system, figs.1-2) to participate as a master device (i.e., communicating with other field units in figs.1-2 is a master-emphasis added) on the radio network (on cell 1 or 2 network between cell 1 or 2 communication system and field units), operable to control communications on the radio network.

Claims 11, 19, 44. (cancelled)

Regarding claims 12, 20, 40, Grube further discloses a processor (controller 110/210-fig.17) operable to control the communications of the at least one radio unit (117, 118,

217, 218) with the radio network (cell 1 or 2) and capable of communicating with the main communication network (to the radio link device 500, figs. 1-2).

Regarding claims 13, 21, 41, Grube further discloses wherein the wireless/mobile/integrated network device (cell 1 or 2 communication system) is operable to participate as a slave on the main communication network (with the radio link device 500, figs. 1-2).

Regarding claims 14, 22, 42, Grube further discloses wherein the main communication network comprises a wired communication network (wired to other repeaters 111-116, 211-216).

Regarding claims 15, 23, 43, Grube further discloses wherein the main communication network comprises a wireless communication network (communication between cell 1 or 2 communication system and system field units, figs.1-2).

Regarding claims 29, 35, 48, Grube further discloses wherein the transceiver enables the wireless/mobile/integrated network device (cell 1 or 2 communication system) to manage communications of a second wireless network device (102 system field unit, figs.1-2), that participates on the radio network (cell 1 or 2 network), with the wireless communication network (with the radio link unit 500).

Regarding claims 30, 36, 49, Grube further discloses wherein the transceiver enables

the wireless network device (cell 1 or 2 communication system, figs. 1-2) to facilitate communications of a second wireless network device (102 system field unit, figs.1-2), that participates on the radio network (cell 1 or 2 network), with the wireless communication network (with the radio link unit 500).

Regarding claims 16, 24, 44, Grube further discloses wherein the transceiver comprises an integrated circuit (figs.1-2).

Regarding claims 26, 32, 45, Grube further discloses wherein the transceiver enables the wireless network device (cell 1 or 2 communication system, figs.1-2) to manage communications of a second wireless network device (102 system field unit, figs.1-2) participating on the radio network (cell 1or 2 network).

Regarding claims 27, 33, 46,

Grube discloses a transceiver (repeater having transmitters 117&217 and 118& 218, figs.1-2) for use in a wireless/mobile network device (cell 1 or 2 communication system, figs.1-2) that operates in a communication system (10-figs. 1-2) that includes a radio network (cell 1 or 2 network), the transceiver comprising:

a radio unit (117-118, 217-218) configured to communicate with the radio network (with other field units 101-104, 201-204 in cell 1 or 2 network);

wherein the transceiver (repeater having transmitters 117&217 and 118& 218, figs.1-2) is operable to enable enables the wireless/mobile network device (cell 1 or 2

communication system, figs.1-2) to participate as a master device (i.e., communicating with other field units in figs.1-2 is a master-emphasis added) on the radio network (on cell 1 or 2 network between cell 1 or 2 communication system and field units), operable to synchronize (by transmitting/receiving between cell 1 communication system and system field unit 102, the transmitters/receivers synchronized) communications of a second wireless/mobile network device (102 system field unit) participating on the radio network (cell 1 or 2 network).

Regarding claims 28, 34, 47,

Grube discloses a transceiver (2nd transmitter/receiver) for use in a wireless/mobile network device (communicator, fig.5) that operates in a communication system that includes a radio network (ADHOC network, col.6, lines 35-56), the transceiver comprising:

a radio unit (117-118, 217-218) configured to communicate with the radio network (with other field units 101-104, 201-204);

wherein the transceiver (repeater having transmitters 117&217 and 118& 218, figs.1-2) is operable to enable enables the wireless network device (cell 1 or 2 communication system, figs.1-2) to participate as a master device (i.e., communicating with other field units in figs.1-2 is a master-emphasis added) on the radio network (on cell 1 or 2 network between cell 1 or 2 communication system and field units), operable to manage communications of a second wireless network device (with system field unit 102) participating on the radio network (cell 1 or 2 network) with a third wireless network

device (with other field units, figs.1-2) participating on the radio network (cell 1 or 2 network).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 17, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube as applied to claims 10, 18 above, and further in view of Gladden (4,152,647).

Regarding claims 17, 25,

Grube does not explicitly disclose wherein the wireless/mobile/integrated network device (cell 1 or 2 communication system, figs. 1-2) is sized to be held by a user.

However, in the same field of endeavor, Gladden (4,152,647) discloses a light-weight, self contained repeater (col.2, lines 13-30). Therefore, it would have been obvious to an artisan at the time of the invention was made to implement Gladden's teaching to Grube's cell 1 or 2 communication system to make it portable, with the motivation being to provide extension of the range and versatility of communication systems by the use of small portable size of repeaters between transceivers of limited range and a base station.

6. Claims 31, 37, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Groenteman (5,398,257).

Regarding claims 31, 37, 51,

Grube discloses a transceiver (2nd transmitter/receiver) for use in a wireless/mobile network device (communicator, figs.4-5) that operates in a communication system that includes a radio network (ADHOC network, col.6, lines 35-56), the transceiver comprising:

a radio unit (117-118, 217-218) is configured to communicate with the radio network (with other field units 101-104, 201-204) using spread spectrum signals;

wherein the transceiver (repeater having transmitters 117&217 and 118& 218, figs.1-2) is operable to enable the wireless/mobile network device (cell 1 or 2 communication system, figs.1-2) to participate as a master device (i.e., communicating with other field units in figs.1-2 is a master-emphasis added) on the radio network (on cell 1 or 2 network between cell 1 or 2 communication system and field units), operable to control communications (with other system field units) on the radio network (cell 1 or 2 network).

Grube does not explicitly disclose wherein the transceiver is configured to communicate with the radio network using spread spectrum signals.

However, in the same field of endeavor, Groenteman discloses wireless transceiver 18 being a two way radio frequency spread spectrum communication device, col.2, lines 28-35. Therefore, it would have been obvious to an artisan at the time of the invention was made to apply Groenteman's teaching to Grube's system to

achieve good communication, with the motivation being to more effectively achieve good communication without interferences.

7. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grube in view of Decker (5,375,051).

Regarding claim 50, Grube does not explicitly disclose wherein the integrated circuit comprises is part of a PCMCIA card.

However, in the same field of endeavor, Decker (5,375,051) discloses radio transceiver connected to a laptop PC via a PCMCIA modem, see fig.1. Therefore, it would have been obvious to an artisan at the time of the invention was made to apply Decker's teaching of PCMCIA modem to Grube's system to extract energy of media access device to turn on the device with the motivation being to conserve the battery power of the mobile device.

Response to Arguments

8. . Applicant's arguments filed 4-6-10 have been fully considered but they are not persuasive.

A/. Applicant argued that the objected limitation "operable to" is a positive claim limitation and disagreed that it is sufficient that the element is operable to perform its associated function.

-In reply, the claimed limitation of "operable to" is not a positive limitation, instead it is an optional recitation. Hence, it is suggested to amend the claimed limitation of "operable to" to ---configured to--- so that the claimed language would be a positive recitation, because when an element was being configured to perform its associated function.

B/. Applicant submitted a Terminal Disclaimer to obviate the double patenting rejection.

-In reply, the Terminal Disclaimer was approved by paralegal, therefore, the double patenting rejection is withdrawn.

C/. Applicant argued that Grube does not teach two networks (main and radio networks) and transmitter/receiver 117/118 is not a master device.

-In reply, note that claim 10 recited "a transceiver (repeater-fig.1) comprising a radio unit (117/118) to communicate with the main (communication between the repeater 117/118 to radio device 500, fig.1) and radio (communication between the repeater 117/118 to other cell field units 101-104) networks; wherein the tranceiver (117/118) is participated as a master device to control communication (with other cell field units 101-104) on the radio network". Applicant is directed to col.2, line 64-col.3, line 23, wherein a cell field unit 101 requests to transmit by sending a data packet called an ISW 21-fig.1 (inbound) on the inbound frequency allocated to control resource receiver 118-fig.1 of the site resource controller 110, and the transmitter 117 of a site

resource controller 110 transmits a grant (outbound) to the requesting communication unit 101 and also allocates a repeater 115 to service the resource grant on the allocated frequencies. Since the site resource controller 110 comprised transmitter/receiver 117/118 and also controlled the granting of communication from the request unit 101 in its cell, thus the site resource controller 110 is participated as a master device within its cell. Therefore, the rejection to claim 10 stands, as well as to claims 18, 38-39.

D/. Applicant argued that the radio link device 500 is not a network.

-In reply, it is agreed that the radio link device 500 is NOT a network. Applicant is directed to col.3, lines 24-64 wherein the radio link device 500 is capable of communicating with cell 1 and other cell 2, thus capable of providing a relayed communication between the repeater 117/118 in cell 1 to a field cell unit 102 in cell 2. In other words, the master device 117/118 controlled communication within its cell 1 (radio network), wherein the radio link device 500 is communicated with resource controller 210 in cell 2, but aslo provided communication to a field cell unit 102 in cell 1 via its master device (resource controller 117/118).

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUONGCHAU BA NGUYEN whose telephone number is (571)272-3148. The examiner can normally be reached on Monday-Friday from 10:15 a.m. to 4:45 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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